Integrated, people-centred eye care, including preventable blindness and impaired vision

Report by the Director-General

1. At meetings of the Officers of the Executive Board in October and November 2019 on the organization of the Board’s 146th session, it was agreed to include an item on integrated people-centred eye care on the provisional agenda.\(^1\)

2. This report sets forth the rationale for action to integrate the delivery of people-centred eye care services into the health system. It describes how to reduce inequities in access to such services and considers how to enable health systems to respond to the projected increase in eye conditions. The report draws on WHO’s World report on vision,\(^2\) published on 9 October 2019.

OPPORTUNITY: RAISING THE PRIORITY ACCORDED TO PUTTING VISION IMPAIRMENT ON NATIONAL AGENDAS

3. Eye care can contribute to achieving Sustainable Development Goal 3 (Ensure healthy lives and promote well-being for all at all ages) and its target 3.8 (Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all). To this end, two indicators for eye care – effective coverage of refractive error (tracer indicator 19) and effective coverage of cataract surgery (tracer indicator 31)\(^3\) – are being considered for inclusion in the universal health coverage index under the WHO Impact Framework for the Thirteenth General Programme of Work, 2019–2023, to monitor progress towards universal health coverage. Eye care is also relevant to other Sustainable Development Goals, including Goal 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all), Goal 5 (Achieve gender equality and empower all women and girls) and Goal 8 (Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all).

4. Vision is the most dominant of the five senses and plays a crucial role in every facet of our lives. There are effective interventions covering the continuum of care that address the needs associated with eye conditions and vision impairment; some are among the most cost-effective and feasible of all health care interventions to implement. These interventions were embedded in the targets of Vision 2020: The Right to Sight, the global initiative for the elimination of avoidable blindness launched by WHO in 1999

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\(^1\) See document EB146/1 (annotated).


\(^3\) See document EB144/7, Annex 1, Table 2 (http://apps.who.int/ebwha/pdf_files/EB144/B144_7-en.pdf, accessed 11 November 2019).
to intensify and accelerate activities for the prevention of blindness. Four resolutions on prevention of avoidable blindness and visual impairment subsequently adopted by the Health Assembly, WHA56.26 (2003), WHA59.25 (2006), WHA62.1 (2009) and WHA66.4 (2013), continued the momentum. Resolutions WHA62.1 and WHA66.4 were accompanied by global action plans. These concerted efforts over the past 30 years have yielded considerable dividends, with an ongoing reduction in the global prevalence of distance vision impairment since 1990 (3.83% in 1990 compared with 2.90% in 2015) and a substantial reduction in the number of children and adults with eye infections and blindness due to vitamin A deficiency, onchocerciasis and trachoma in all regions.

5. Despite these efforts, at least one billion people globally have a vision impairment that could have been prevented or is yet to be addressed. Unaddressed refractive error and cataract remain major items on the unfinished agenda of public health; more than 800 million people have distance or near vision impairment that could be addressed with an appropriate pair of spectacles, while an estimated 65 million people have moderate-to-severe distance vision impairment or blindness that could be corrected through access to cataract surgery. An additional 16 million people globally have moderate or severe vision impairment or blindness due to glaucoma, corneal opacities, diabetic retinopathy and trachoma that could have been prevented through early detection and timely management.

6. Vast inequities exist in the prevalence of vision impairment. The prevalence in many low- and middle-income regions is estimated to be four times higher than in high-income regions. Coverage rates of cataract surgery – an indicator of eye care service provision within populations – show marked variations by income level. Inequities also exist within countries: the prevalence of vision impairment tends to be higher in underserved populations, such as women, migrants, indigenous peoples and persons with certain kinds of disability, and in rural communities.

7. Eye conditions and vision impairment pose a significant personal and societal burden. The Global Burden of Disease Study 2017 ranked vision impairment the third cause among all impairments for years lived with disability. Vision impairment also poses an enormous global financial burden: annual global productivity losses associated with vision impairment from uncorrected myopia and presbyopia alone are estimated to be US$ 244 billion and US$ 25.4 billion, respectively.

GLOBAL CHALLENGES FOR MEETING EYE CARE NEEDS

8. Global demographic trends, including population ageing and growth, and behavioural and lifestyle factors will cause a substantial increase in the number of people with eye conditions and vision impairment. The number of people with the age-related eye condition glaucoma, for example, has been projected to increase by 1.3 times between 2020 (76 million) and 2030 (95.4 million), and the number of people with age-related macular degeneration by 1.2 times between 2020 (195.6 million) and 2030 (243.3 million). Similarly, the number of people with presbyopia has been projected to increase from 1.8 billion in 2015 to 2.1 billion in 2030. As a result of lifestyle changes, including reduced time spent outdoors and increased near-work activities, the number of people with myopia has been estimated to rise from 1.95 billion in 2010 to 3.36 billion in 2030.

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9. New strategies are needed to meet the challenges related to the rapid emergence of noncommunicable chronic eye conditions such as diabetic retinopathy, glaucoma, age-related macular degeneration, complications of high myopia and retinopathy of prematurity. These conditions require a comprehensive range of interventions for their management as well as long-term care, which will have a profound impact on the already strained health system and eye care workforce.

10. Reliable data are lacking on the frequency of eye conditions that do not typically cause vision impairment (such as conjunctivitis, lid abnormalities, pterygium and dry eye). These conditions are among the leading reasons for patients to present to eye care services in all countries and can also lead to personal and financial hardships because of the treatment needs of patients. For these reasons, an improved understanding of the magnitude of such eye conditions is needed to be able to conduct effective planning.

11. A shortage of trained human resources in low- and middle-income countries is one of the greatest challenges to increasing the availability of eye care services and reducing the prevalence of preventable or addressable vision impairment and blindness. Several factors accentuate the problems associated with the shortage of health workers; these include suboptimal distribution (both geographically and across income levels), issues with retention, and poor supervision and coordination of eye care services among health professionals.

12. Vision rehabilitation services are essential to optimize the everyday functioning of individuals with vision impairment or blindness that cannot be treated; however, coverage of these services is poor. The change in population demographics and rise in the number of people with vision impairment that cannot be treated will lead to increased demand for such services.

13. Eye care is poorly integrated within health systems. Although WHO’s global action plan on universal eye health 2014–2019\(^1\) promoted the implementation of integrated national eye health policies, plans and programmes, strategic plans for eye care are not currently included in health sector strategic plans in most low- and middle-income countries. As a result, eye care medicines and interventions are still not integrated into the health insurance schemes in many of those countries: of 29 countries (59% low-income or lower-middle-income countries) that completed the WHO eye care service assessment tool between 2014 and 2016, more than 20% reported that health insurance schemes did not cover any eye care services. Several other countries reported that eye care services were only minimally covered.

14. Health information systems are essential for policy-makers to identify and respond to problems with evidence-based solutions and allocate resources effectively. They are essential for planners to design more effective services and for managers to monitor and evaluate these services, and for clinicians to provide high-quality and evidence-based care. However, even countries with advanced health information systems often do not include relevant data on eye conditions and vision impairment, their determinants, and health systems data related to eye care. Consequently, decision-makers at all levels of the health system may lack the information they need to identify problems and needs, allocate resources optimally or provide evidence-based services.

ADDRESSING CHALLENGES THROUGH THE IMPLEMENTATION OF INTEGRATED PEOPLE-CENTRED EYE CARE

15. On 9 October 2019, WHO published the first World report on vision. The key proposal of the report was to make integrated people-centred eye care the care model of choice and to ensure its widespread implementation. Building on WHO’s framework on integrated people-centred health services, integrated people-centred eye care is defined as services that: are managed and delivered so that people receive a continuum of health interventions covering promotion, prevention, treatment and rehabilitation; address the full spectrum of eye conditions according to people’s needs; are coordinated across the different levels and sites of care within and beyond the health sector; and recognize people as participants and beneficiaries of these services throughout their life course.

16. Integrated people-centred eye care has the potential to facilitate approaches to service delivery that respond to emerging health challenges in the eye care sector, including unhealthy lifestyles and ageing populations, and the need to address a range of noncommunicable eye conditions. Achieving integrated people-centred eye care requires Member States to adopt four key strategies:

- **empowering and engaging people and communities**, specifically underserved populations, through raising awareness of the importance of early identification of eye conditions, the need to prevent and address vision impairment, and ways to access eye care services. This also includes simplifying access to care for underserved populations by taking advantage of technological advances.

- **reorienting the model of care towards strengthening eye care in primary health care**: in the Declaration of Astana in 2018, Member States called for a renewal of primary health care to deal effectively with current and future challenges to health. Primary healthcare makes it possible for health systems to adapt and respond to changing population demographics and lifestyle changes and the increasing number of people with eye conditions and vision impairment. In addition, primary health care promotes access to services across the continuum of care while facilitating the use of promotive and preventive services that are often more cost-effective than treatment services. Finally, primary health care is crucial for sustainably dealing with other key components of universal health coverage, such as: reducing household expenditure by emphasizing population-level services that prevent eye conditions and promote early detection and timely referral; and reaching remote and disadvantaged populations through a focus on community-based services that are provided as close as feasible to people’s homes.

- **coordinating services within and across sectors**: coordination of care for the individual involves a range of strategies including case management, task-sharing and efficient referral systems to improve the continuity of eye care, and a discrete, coherent and interconnected care process that meets individual needs and preferences. Coordination also involves reinforcing linkages between eye care services in relevant programmes (for example, diabetes, maternal and child health, and ageing) and in relevant sectors (such as social services, finance, education and labour). Given the growing demands for eye care services, effective options for public-private partnerships also need to be explored as a means of providing affordable eye care.

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• **creating an enabling environment** by integrating eye care into national health strategic plans, ensuring that workforce planning for eye care is an integral part of health workforce planning and that a competency-based care approach is adopted, and ensuring that health information systems include comprehensive information about eye care to identify needs, plan service delivery effectively and monitor progress.

17. To redress inequities, eye care must be an integral part of universal health coverage. This requires the provision of quality eye care services according to population needs and the inclusion of priority eye care interventions in service packages covered by pre-paid pooled financing. The Secretariat is developing a package of eye care interventions to facilitate the integration of eye care into the health sector and universal health coverage.

18. To be sustainable, integrated people-centred eye care requires high-quality research on implementation and health systems that complements existing evidence for effective eye care interventions. To this end, the creation of a global research agenda that includes health systems and policy research is important. Moreover, studies analysing the costs and benefits of implementing the package of eye care interventions at the individual and societal levels will be necessary. Eye care is highly likely to benefit from technological advances; research is required to ensure that such advances have an impact on clinical care and people’s lives.

19. It is important to monitor the progress made towards implementing integrated people-centred eye care and its impact at the population level. Such monitoring will require the strengthening of national capacity to collect, analyse and use data on eye care and periodic collection of epidemiological data on eye conditions and vision impairment. The creation of a menu of global indicators for eye conditions and vision impairment that facilitates the selection of national indicators and promotes cross-country comparisons will be important to evaluate progress towards implementation.

20. In addition to generating a significant improvement in quality of life for the patient (that is, improvement in everyday functioning), preventing and addressing vision impairment yield a large financial return on investment for society by avoiding loss of productivity due to eye conditions such as myopia, presbyopia and diabetic retinopathy, which often affect individuals at the peak of their working lives.

**ACTION BY THE EXECUTIVE BOARD**

21. The Board is invited to note the report and to provide guidance on next steps.